

reflection (Jonas Barklund, Pierangelo Dell'Acqua, Stefania Constantini, and Gaetano A. Lanzarone. Author index.

Principles and Practice of Constraint Programming: The Newport Papers. Edited by Vijay Saraswat and Pascal Van Hentenryck. MIT Press, Cambridge, MA. (1995). 475 pages. \$49.95.

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Preface. I. Concurrency. 1. A concurrent semantics for concurrent constraint programs via contextual nets (Ugo Montanari and Francesca Rossi). 2. Object-oriented concurrent constraint programming in Oz (Martin Henz, Gert Smolka, and Jörg Würtz). II. Reactive systems. 3. Constraint programming in constraint nets (Ying Zhang and Alan K. Mackworth). 4. Robot programming constraints (Dinseh K. Pai). 5. Constraint logic programming: Hybrid control, logic as linear programming (Wolf Kohn, Anil Nerode, and V.S. Subrahmanian). III. Languages and environments. 6. 2LP: Linear programming and logic programming (Ken McAloon and Carol Tretkoff). 7. A constraint-based scientific programming language (Richard Zippel). 8. Designing constraint logic programming languages using computational systems (Claude Kirchner, Hélène Kirchner, and Marian Vittek). 9. Aggregation in constraint databases (Gabriel M. Kuper). 10. Synthesis of constraint algorithms (Douglas R. Smith and Stephen J. Westfold). 11. Exploiting constraint dependency information for debugging and explanation (Walid T. Keirouz, Glenn A. Kramer, and Jahir Pabon). 12. Constraining the structure and style of object-oriented programs (Scott Myers, Carolyn K. Duby, and Steven P. Reiss). IV. Constraint-solving algorithms. 13. An approach for solving systems of parametric polynomial equations (Deepak Kapur). 14. Fourier's elimination: Which to choose? (Jean-Louise Imbert). 15. Verifying logic circuits by Benders decomposition (J.N. Hooker and H. Yan). 16. An incremental hierarchical constraint solver (Francisco Menezes and Pedro Barahona). V. Artificial Intelligence. 17. A disjunctive decomposition control schema for constraint satisfaction (Eugene C. Freuder and Paul D. Hubbe). 18. Local consistency in parallel constraint-satisfaction networks (Simon Kasif and Arthur L. Delcher). 19. Terminological reasoning with constraint handling rules (Thom Frühwirth and Philipp Hanschke). VI. Computer graphics. 20. The SkyBlue constraint solver and its applications (Michael Sannella). 21. Practical issues in graphical constraints (Michael Gleicher). 22. Constraint management in a declarative design method for 3D scene sketch modeling (Stéphane Donikian and Gérard Hégon). 23. Expressing constraints for data display specification: A visual approach (Isabel F. Cruz). Contributors.

Cognitive Models of Speech Processing: Psycholinguistic and Computational Perspectives. Edited by Gerry T. M. Altmann. MIT Press, Cambridge, MA. (1990). 540 pages. \$20.00.

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Preface. 1. Cognitive models of speech processing: An introduction (Gerry T.M. Altmann). 2. Lexical hypotheses in continuous speech (Richard Shillcock). 3. Lexical segmentation in TRACE: An exercise in simulation (Uli H. Frauenfelder and Guus Peters). 4. A dynamic-net model of human speech recognition (Dennis Norris). 5. Exploiting prosodic probabilities in speech segmentation (Anne Cutler). 6. Similarity neighborhoods of spoken words (Paul A. Luce, David B. Pisoni, and Steven D. Goldinger). 7. Activation, competition, and frequency in lexical access (William Marslen-Wilson). 8. Retroactive influence of syllable neighborhoods (Jan Charles-Luce, Paul A. Luce, and Michael S. Cluff). 9. Competition, lateral inhibition, and frequency: Comments on the chapters of Frauenfelder and Peters, Marslen-Wilson, and others). 10. Lexical statistics and cognitive models of speech processing (Gerry T.M. Altmann). 11. Constraining models of lexical access: The onset of word recognition (Jacques Mehler, Emmanuel Dupoux, and Juan Segui). 12. The role of the syllable in speech segmentation, phoneme identification, and lexical access (Juan Segui, Emmanuel Dupoux, and Jacques Mehler). 13. Effects of sentence context and lexical knowledge in speech processing (Cynthia Connine). 14. Using perceptual-restoration effects to explore the architecture of perception (Arthur G. Samuel). 15. The relationship between sentential context and sensory input: Comments on Connine's and Samuel's chapters (Lorraine K. Tyler). 16. Modularity compromised: Selecting partial hypotheses (Henry Thompson and Gerry T.M. Altmann). 17. Representation and structure in connectionist models (Jeffrey L. Elman). 18. Combinatory lexical information and language comprehension (Michael K. Tanenhaus, Susan M. Garnsey, and Julie Boland). 19. Exploring the architecture of the language-processing system (Lyn Frazier). 20. Thematic roles and modularity: Comments on the chapters by Frazier and Tanenhaus *et al.* (Janet Dean Fodor). 21. Syntax and intonational structure in a combinatory grammar (Mark J. Steedman). 22. Description theory and intonation boundaries (Mitchell Marcus and Donald Hindle). 23. Phrase structure and intonational phrases: Comments on the chapters by Marcus and Steedman (Aravind K. Joshi). Contributors. Index.

Exploring General Equilibrium. By Fischer Black. MIT Press, Cambridge, MA. (1995). 381 pages. \$29.95.

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